DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-20, in the reply filed on March 13, 2008 is acknowledged. The traversal is on the ground(s) that simultaneous examination will not present an undue burden. This is not found persuasive because the searches for apparatus and method are not coextensive.

The requirement is still deemed proper and is therefore made FINAL.

Claims 21-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on March 13, 2008.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 2 and 3, “an optical unit controlling a synthesized beam formed by synthesizing the laser beams from the beam generators to generate an output beam" is a run-on description.

Claim 6, line 2, “a beam splitter splitting a synthesized beam” is a method limitation in an apparatus claim and does not provide clear description of the apparatus.

Claim 16, line 4, "controlling one of the beamlet" is non-idiomatic language.

Claims 5 and 15 are workpiece limitations which do not further limit the apparatus claims.

The dependent claims contain the unclear language found in their respective independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al.

JP2000252574A describes (Abstract) a synthesized laser beam.

Tanaka et al show (Front Page) a stage 109 mounting a substrate.

The use of the movable stage with the synthesized beam would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to continuously process a workpiece.

The workpiece recited in claim 5 does not impart patentability to the apparatus claim.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al as applied to claim 1 above, and further in view of JP409213651A.

JP409213651A describes overlapped beams which may have shifted timing and this process of operation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to change anneal parameters.

Tanaka et al describe (Abstract) the synthesized beam.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al as applied to claim 1 above, and further in view of JP359201441A.

JP359201441A describes a beam system and moved stage inside a chamber and this configuration would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art for maintaining the beam apparatus in a constant environment.

Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al as applied to claim 1 above, and further in view of USPN 6,977,775 to Sasaki et al in view of Masaki et al.

Sasaki et al show (e.g., Figure 8) plural beams and a workpiece.

Masaki et al show (Front Page) plural work stations.

The use of plural silicon crystallization work stations would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to speed processing.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al in view of USPN 6,977,775 to Sasaki et al in view of Masaki et al as applied to claim 6 above, and further in view of JP409213651A.

JP409213651A describes overlapped beams which may have shifted timing and this process of operation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to change anneal parameters.

Claims 9-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000252574A in view of USPN 6,750,423 to Tanaka et al in view of USPN 6,977,775 to Sasaki et al in view of Masaki et al as applied to claim 6 above, and further in view of JP359201441A.

JP359201441A describes a beam system and moved stage inside a chamber and this configuration would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art for maintaining the beam apparatus in a constant environment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/
Primary Examiner, Art Unit 3742